

NEW CLAIMS

6. A balun, comprising: a plurality of planar lines coupled to each other, one end of a first of the lines running between a second of the lines and a third of the lines serving as an unbalanced gate, the other end of the first line being connected to ground, one end of each of the second and third lines serving as a balanced gate, and the other ends of the second and third lines, not serving as gates, being capacitively coupled to each other.
7. The balun according to claim 6, wherein, for capacitive coupling, the other ends of the second and third lines are connected to line sections that run next to each other over a stipulated length.
8. The balun according to claim 6, wherein, for capacitive coupling, the other ends of the second and third lines are connected to each other via at least one capacitor.
9. The balun according to claim 6, and a capacitor connected in series to the third line.
10. The balun according to claim 6, wherein the first, second and third lines coupled to each other have a coupling length of about one-fourth of an average operating wavelength of the balun.